Overview

Today and every day, the lives of vast numbers of people lie in the hands of health systems. From the safe delivery of a healthy baby to the care with dignity of the frail elderly, health systems have a vital and continuing responsibility to people throughout the lifespan. They are crucial to the healthy development of individuals, families and societies everywhere.

In this report, health systems are defined as comprising all the organizations, institutions and resources that are devoted to producing health actions. A health action is defined as any effort, whether in personal health care, public health services or through intersectoral initiatives, whose primary purpose is to improve health.

But while improving health is clearly the main objective of a health system, it is not the only one. The objective of good health itself is really twofold: the best attainable average level – *goodness* – and the smallest feasible differences among individuals and groups – *fairness.* Goodness means a health system responding well to what people expect of it; fairness means it responds equally well to everyone, without discrimination. In *The world health report 2000*, devoted entirely to health systems, the World Health Organization expands its traditional concern for people's physical and mental well-being to emphasize these other elements of goodness and fairness.

To an unprecedented degree, it takes account of the roles people have as providers and consumers of health services, as financial contributors to health systems, as workers within them, and as citizens engaged in the responsible management, or stewardship, of them. And it looks at how well or how badly systems address inequalities, how they respond to people's expectations, and how much or how little they respect people's dignity, rights and freedoms.

The world health report 2000 also breaks new ground in presenting for the first time an index of national health systems' performance in trying to achieve three overall goals: *good health, responsiveness to the expectations of the population,* and *fairness of financial contribution*.

Progress towards them depends crucially on how well systems carry out four vital functions. These are: *service provision, resource generation, financing* and *stewardship.* The report devotes a chapter to each function, and reaches conclusions and makes policy recommendations on each. It places special emphasis on stewardship, which has a profound influence on the other three.

Many questions about health system performance have no clear or simple answers – because outcomes are hard to measure and it is hard to disentangle the health *system*'s contribution from other factors. Building on valuable previous work, this report introduces WHO's framework for assessing health system performance. By clarifying and quantifying

the goals of health systems and relating them to the essential functions, the framework is meant to help Member States measure their own performance, understand the factors that contribute to it, improve it, and respond better to the needs and expectations of the people they serve and represent. The analysis and synthesis of a wealth of information is summarized by a measure of overall achievement and by a performance index which should lead to much new research and policy development. The index will be a regular feature of forthcoming *World health reports* and will be improved and updated every year.

The framework was the basis for round table discussions entitled "*Addressing the major health system challenges*" among Ministers of Health at the 53rd World Health Assembly in Geneva in May 2000. The subject of these discussions is reflected throughout the report, and the outcome of the discussions will help orient future work on the framework.

Policy-makers need to know why health systems perform in certain ways and what they can do to improve the situation. All health systems carry out the functions of providing or delivering personal and non-personal health services; generating the necessary human and physical resources to make that possible; raising and pooling the revenues used to purchase services; and acting as the overall stewards of the resources, powers and expectations entrusted to them.

Comparing the way these functions are actually carried out provides a basis for understanding performance variations over time and among countries. Undoubtedly, many of the concepts and measures used in the report will require refinement. There is an important agenda of developing more and better data on goal attainment and on health system functions. Yet much can be learned from existing information. The report presents the best available evidence to date. In doing so, it seeks to push forward national and global development of the skills and information required to build a solid body of evidence on the level and determinants of performance, as a basis for improving how systems work.

"Improving performance" are therefore the key words and the *raison d'être* of this report. The overall mission of WHO is the attainment by all people of the highest possible level of health, with special emphasis on closing the gaps within and among countries. The Organization's ability to fulfil this mission depends greatly on the effectiveness of health systems in Member States – and strengthening those systems is one of WHO's four strategic directions. It connects very well with the other three: reducing the excess mortality of poor and marginalized populations; dealing effectively with the leading risk factors; and placing health at the centre of the broader development agenda.

Combating disease epidemics, striving to reduce infant mortality, and fighting for safer pregnancy are all WHO priorities. But the Organization will have very little impact in these and other battlegrounds unless it is equally concerned to strengthen the health systems through which the ammunition of life-saving and life-enhancing interventions are delivered to the front line.

This report asserts that the differing degrees of efficiency with which health systems organize and finance themselves, and react to the needs of their populations, explain much of the widening gap in death rates between the rich and poor, in countries and between countries, around the world. Even among countries with similar income levels, there are unacceptably large variations in health outcomes. The report finds that inequalities in life expectancy persist, and are strongly associated with socioeconomic class, even in countries that enjoy an average of quite good health. Furthermore the gap between rich and poor widens when life expectancy is divided into years in good health and years of disability. In effect, the poor not only have shorter lives than the non-poor, a bigger part of their lifetime is surrendered to disability.

In short, how health systems – and the estimated 35 million or more people they employ worldwide – perform makes a profound difference to the quality and value, as well as the length of the lives of the billions of people they serve.

How health systems have evolved

This report's review of the evolution of modern health systems, and their various stages of reform, leaves little doubt that in general they have already contributed enormously to better health for most of the global population during the 20th century.

Today, health systems in all countries, rich and poor, play a bigger and more influential role in people's lives than ever before. Health systems of some sort have existed for as long as people have tried to protect their health and treat diseases. Traditional practices, often integrated with spiritual counselling and providing both preventive and curative care, have existed for thousands of years and often coexist today with modern medicine.

But 100 years ago, organized health systems in the modern sense barely existed. Few people alive then would ever visit a hospital. Most were born into large families and faced an infancy and childhood threatened by a host of potentially fatal diseases – measles, smallpox, malaria and poliomyelitis among them. Infant and child mortality rates were very high, as were maternal mortality rates. Life expectancy was short – even half a century ago it was a mere 48 years at birth. Birth itself invariably occurred at home, rarely with a physician present.

As a brief illustration of the contemporary role of health systems, one particular birth receives special attention in this report. Last year, United Nations experts calculated that the global population would reach six billion on 13 October 1999. On that day, in a maternity clinic in Sarajevo, a baby boy was designated as the sixth billionth person on the planet. He entered the world with a life expectancy of 73 years, the current Bosnian average.

He was born in a big city hospital, staffed by well-trained midwives, nurses, doctors and technicians. They were supported by high-technology equipment, drugs and medicines. The hospital is part of a sophisticated health service, connected in turn to a wide network of people and actions that in one way or another are concerned with measuring, maintaining and improving his health for the rest of his life – as for the rest of the population. Together, all these interested parties, whether they provide services, finance them or set policies to administer them, make up a health system.

Health systems have undergone overlapping generations of reforms in the past 100 years, including the founding of national health care systems and the extension of social insurance schemes. Later came the promotion of primary health care as a route to achieving affordable universal coverage – the goal of health for all. Despite its many virtues, a criticism of this route has been that it gave too little attention to people's *demand* for health care, and instead concentrated almost exclusively on their perceived *needs*. Systems have foundered when these two concepts did not match, because then the supply of services offered could not possibly align with both.

In the past decade or so there has been a gradual shift of vision towards what WHO calls the "new universalism". Rather than all possible care for everyone, or only the simplest and most basic care for the poor, this means delivery to all of high-quality essential care, defined mostly by criteria of effectiveness, cost and social acceptability. It implies explicit choice of priorities among interventions, respecting the ethical principle that it may be necessary and efficient to ration services, but that it is inadmissible to exclude whole groups of the population.

This shift has been partly due to the profound political and economic changes of the last 20 years or so. These include the transformation from centrally planned to market-oriented economies, reduced state intervention in national economies, fewer government controls, and more decentralization.

Ideologically, this has meant greater emphasis on individual choice and responsibility. Politically, it has meant limiting promises and expectations about what governments should do. But at the same time people's expectations of health systems are greater than ever before. Almost every day another new drug or treatment, or a further advance in medicine and health technology, is announced. This pace of progress is matched only by the rate at which the population seeks its share of the benefits.

The result is increasing demands and pressures on health systems, including both their public and private sectors, in all countries, rich or poor. Clearly, limits exist on what governments can finance and on what services they can deliver. This report means to stimulate public policies that acknowledge the constraints governments face. If services are to be provided for all, then not all services can be provided.

The potential to improve

Within all systems there are many highly skilled, dedicated people working at all levels to improve the health of their communities. As the new century begins, health systems have the power and the potential to achieve further extraordinary improvements.

Unfortunately, health systems can also misuse their power and squander their potential. Poorly structured, badly led, inefficiently organized and inadequately funded health systems can do more harm than good.

This report finds that many countries are falling far short of their potential, and most are making inadequate efforts in terms of responsiveness and fairness of financial contribution. There are serious shortcomings in the performance of one or more functions in virtually all countries.

These failings result in very large numbers of preventable deaths and disabilities in each country; in unnecessary suffering; in injustice, inequality and denial of basic rights of individuals. The impact is most severe on the poor, who are driven deeper into poverty by lack of financial protection against ill-health. In trying to buy health from their own pockets, sometimes they only succeed in lining the pockets of others.

In this report, the poor also emerge as receiving the worst levels of responsiveness – they are treated with less respect for their dignity, given less choice of service providers and offered lower-quality amenities.

The ultimate responsibility for the overall performance of a country's health system lies with government, which in turn should involve all sectors of society in its stewardship. The careful and responsible management of the well-being of the population is the very essence of good government. For every country it means establishing the best and fairest health system possible with available resources. The health of the people is always a national priority: government responsibility for it is continuous and permanent. Ministries of health must therefore take on a large part of the stewardship of health systems.

Health policy and strategies need to cover the private provision of services and private financing, as well as state funding and activities. Only in this way can health systems as a whole be oriented towards achieving goals that are in the public interest. Stewardship encompasses the tasks of defining the vision and direction of health policy, exerting influence through regulation and advocacy, and collecting and using information. At the interna-

tional level, stewardship means mobilizing the collective action of countries to generate global public goods such as research, while fostering a shared vision towards more equitable development across and within countries. It also means providing an evidence base to assist countries' efforts to improve the performance of their health systems.

But this report finds that some countries appear to have issued no national health policy statement in the past decade; in others, policy exists in the form of documents which gather dust and are never translated into action. Too often, health policy and strategic planning have envisaged unrealistic expansion of the publicly funded health care system, sometimes well in excess of national economic growth. Eventually, the policy and planning document is seen as infeasible and is ignored.

A policy framework should recognize all three health system goals and identify strategies to improve the attainment of each. But not all countries have explicit policies on the overall goodness and fairness of the health system. Public statements about the desired balance among health outcomes, system responsiveness and fairness in financial contribution are yet to be made in many countries. Policy should address the way in which the system's key functions are to be improved.

This report finds that, within governments, many health ministries are seriously shortsighted, focusing on the public sector and often disregarding the – frequently much larger – private provision of care. At worst, governments are capable of turning a blind eye to a "black market" in health, where widespread corruption, bribery, "moonlighting" and other illegal practices have flourished for years and are difficult to tackle successfully. Their vision does not extend far enough to help construct a healthier future.

Moreover, some health ministries are prone to losing sight completely of their most important target: the population at large. Patients and consumers may only come into view when rising public dissatisfaction forces them to the ministry's attention.

Many health ministries condone the evasion of regulations that they themselves have created or are supposed to implement in the public interest. Rules rarely enforced are invitations to abuse. A widespread example is the condoning of public employees charging illicit fees from patients and pocketing the proceeds, a practice known euphemistically as "informal charging". Such corruption deters poor people from using services they need, making health financing even more unfair, and it distorts overall health priorities.

Providing better services

Too many governments know far too little about what is happening in the provision of services to their people. In many countries, some if not most physicians work simultaneously for the government and in private practice. When public providers illegally use public facilities to provide special care to private patients, the public sector ends up subsidizing unofficial private practice. Health professionals are aware of practice-related laws but know that enforcement is weak or non-existent. Professional associations, nominally responsible for self-regulation, are too often ineffective.

Oversight and regulation of private sector providers and insurers must be placed high on national policy agendas. At the same time it is crucial to adopt incentives that are sensitive to performance. Good policy needs to differentiate between providers (public or private) who are contributing to health goals, and those who are doing damage, and encourage or sanction appropriately. Policies to change the balance between providers' autonomy and accountability need to be monitored closely in terms of their effect on health, responsiveness and the distribution of the financing burden.

Where particular practices and procedures are known to be harmful, the health ministry has a clear responsibility to combat them with public information and legal measures. Pharmaceutical sales by unregistered sellers, the dangers of excessive antibiotic prescription and of non-compliance with recommended dosages should all be objects of public stewardship, with active support from information campaigns targeted at patients, the providers in question and local health authorities.

Contrary to what might be expected, the share of private health financing tends to be larger in countries where income levels are lower. But poorer countries seldom have clear lines of policy towards the private sector. They thus have major steps to take in recognizing and communicating with the different groups of private providers, the better to influence and regulate them.

The private sector has the potential to play a positive role in improving the performance of the health system. But for this to happen, governments must fulfil the core public function of stewardship. Proper incentives and adequate information are two powerful tools to improve performance.

To move towards higher quality care, more and better information is commonly required on existing provision, on the interventions offered and on major constraints on service implementation. Local and national risk factors need to be understood. Information on numbers and types of providers is a basic – and often incompletely fulfilled – requirement. An understanding of provider market structure and utilization patterns is also needed, so that policy-makers know why this array of provision exists, as well as where it is growing.

An explicit, public process of priority setting should be undertaken to identify the contents of a benefit package which should be available to all, and which should reflect local disease priorities and cost effectiveness, among other criteria. Supporting mechanisms – clinical protocols, registration, training, licensing and accreditation processes – need to be brought up to date and used. There is a need for a regulatory strategy which distinguishes between the components of the private sector and includes the promotion of self-regulation.

Consumers need to be better informed about what is good and bad for their health, why not all of their expectations can be met, and that they have rights which all providers should respect. Aligning organizational structures and incentives with the overall objectives of policy is a task for stewardship, not just for service providers.

Monitoring is needed to assess behavioural change associated with decentralizing authority over resources and services, and the effects of different types of contractual relationships with public and private providers. Striking a balance between tight control and the independence needed to motivate providers is a delicate task, for which local solutions must be found. Experimentation and adaptation will be necessary in most settings. A supporting process for exchanging information will be necessary to create a 'virtual network' from a large set of semi-autonomous providers.

Finding a better balance

The report says serious imbalances exist in many countries in terms of human and physical resources, technology and pharmaceuticals. Many countries have too few qualified health personnel, others have too many. Health system staff in many low-income nations are inadequately trained, poorly-paid and work in obsolete facilities with chronic shortages of equipment. One result is a "brain drain" of talented but demoralized professionals who either go abroad or move into private practice. Here again, the poor are most affected.

Overall, governments have too little information on financial flows and the generation of human and material resources. To rectify this, national health accounts (NHAs) should be much more widely calculated and used. They provide the essential information needed to monitor the ratio of capital to recurrent expenditure, or of any one input to the total, and to observe trends. NHAs capture foreign as well as domestic, public as well as private inputs and usefully assemble data on physical quantities – such as the numbers of nurses, medical equipment, district hospitals – as well as their costs.

NHAs in some form now exist for most countries, but they are still often rudimentary and are not yet widely used as tools of stewardship. NHA data allow the ministry of health to think critically about input purchases by all fundholders in the health system.

The concept of strategic purchasing, discussed in this report, does not only apply to the purchase of health care services: it applies equally to the purchase of health system inputs. Where inputs such as trained personnel, diagnostic equipment and vehicles are purchased directly with public funds, the ministry of health has a direct responsibility to ensure that value for money is obtained – not only in terms of good prices, but also in ensuring that effective use is made of the items purchased.

Where health system inputs are purchased by other agencies (such as private insurers, providers, households or other public agencies) the ministry's stewardship role consists of using its regulatory and persuasive influence to ensure that these purchases improve, rather than worsen, the efficiency of the input mix.

The central ministry may have to decide on major capital decisions, such as tertiary hospitals or medical schools. But regional and district health authorities should be entrusted with the larger number of lower-level purchasing decisions, using guidelines, criteria and procedures promoted by central government.

Ensuring a healthy balance between capital and recurrent spending in the health system requires analysis of trends in both public and private spending and a consideration of both domestic and foreign funds. A clear policy framework, incentives, regulation and public information need to be brought to bear on important capital decisions in the entire system to counter ad hoc decisions and political influence.

In terms of human resources, similar combinations of strategy have had some success in tackling the geographical imbalances common within countries. In general, the content of training needs to be reassessed in relation to workers' actual job content, and overall supply often needs to be adjusted to meet employment opportunities.

In some countries where the social return to medical training is negative, educational institutions are being considered for privatization or closure. Certainly, public subsidies for training institutions often need to be reconsidered in the light of strategic purchasing. Rebalancing the intake levels of different training facilities is often possible without closure, and might free resources which could be used to retrain in scarcer skills those health workers who are clearly surplus to requirements.

Major equipment purchases are an easy way for the health system to waste resources, when they are underused, yield little health gain, and use up staff time and recurrent budget. They are also difficult to control. All countries need access to information on technology assessment, though they do not necessarily need to produce this themselves. The stewardship role lies in ensuring that criteria for technology purchase in the public sector (which all countries need) are adhered to, and that the private sector does not receive incentives or public subsidy for its technology purchases unless these further the aim of national policy.

Providers frequently mobilize public support or subscriptions for technology purchase, and stewardship has to ensure that consumers understand why technology purchases have

to be rationed like other services. Identifying the opportunity cost of additional technology in terms of other needed services may help to present the case to the public.

Protecting the poor

In the world's poorest countries, most people, particularly the poor, have to pay for health care from their own pockets at the very time they are sick and most in need of it. They are less likely to be members of job-based prepayment schemes, and have less access than better-off groups to subsidized services.

This report presents convincing evidence that prepayment is the best form of revenue collection, while out-of-pocket payment tends to be quite regressive and often impedes access to care. In poor countries, the poor often suffer twice – all of them have to pay an unfair share through taxes or insurance schemes, whether or not they use health services, and some of them have also to pay an even more unfair contribution from their pockets. Evidence from many health systems shows that prepayment through insurance schemes leads to greater financing fairness. The main challenge in revenue collection is to expand prepayment, in which public financing or mandatory insurance will play a central role. In the case of revenue pooling, creating as wide a pool as possible is critical to spreading financial risk for health care, and thus reducing individual risk and the spectre of impoverishment from health expenditures.

Insurance systems entail integration of resources from individual contributors or sources both to pool and to share risks across the population. Achieving greater fairness in financing is only achievable through risk pooling – that is, those who are healthy subsidize those who are sick, and those who are rich subsidize those who are poor. Strategies need to be designed for expansion of risk pooling so that progress can be made in such subsidies.

Raising the level of public finance for health is the most obvious route to increased prepayment. But the poorest countries raise less, in public revenue, as a percentage of national income than middle and upper income countries. Where there is no feasible organizational arrangement to boost prepayment levels, both donors and governments should explore ways of building enabling mechanisms for the development or consolidation of very large pools. Insurance schemes designed to expand membership among the poor would, moreover, be an attractive way to channel external assistance in health, alongside government revenue.

Many countries have employment-based schemes which increase benefits for their privileged membership – mainly employees in the formal sector of the economy – rather than widen them for a larger pool. Low income countries could encourage different forms of prepayment – job-based, community-based, or provider-based – as part of a preparatory process of consolidating small pools into larger ones. Governments need to promote community rating (i.e. each member of the community pays the same premium), a common benefit package and portability of benefits among insurance schemes, and public funds should pay for the inclusion of poor people in such schemes.

In middle income countries the policy route to fair prepaid systems is through strengthening the often substantial mandatory, income-based and risk-based insurance schemes, again ensuring increased public funding to include the poor. Although most industrialized countries already have very high levels of prepayment, some of these strategies are also relevant to them.

To ensure that prepaid finance obtains the best possible value for money, strategic purchasing needs to replace much of the traditional machinery linking budget holders to service providers. Budget holders will no longer be passive financial intermediaries. Strategic purchasing means ensuring a coherent set of incentives for providers, whether public or private, to encourage them to offer priority interventions efficiently. Selective contracting and the use of several payment mechanisms are needed to set incentives for better responsiveness and improved health outcomes.

In conclusion, this report sheds new light on what makes health systems behave in certain ways, and offers them better directions to follow in pursuit of their goals. WHO hopes it will help policy-makers weigh the many complex issues involved and make wise choices. If they do so, substantial gains will be possible for all countries; and the poor will be the principal beneficiaries.